GLIOMA OF THE RIGHT TEMPORAL LOBE, WITH INTERCURRENT HEMORRHAGE. A CASE IN WHICH THE QUESTION OF TREPHINING WAS CONSIDERED AND DECIDED AGAINST.[1]

By CHARLES K. MILLS, M.D., and GEORGE A. BODAMER, M.D.

THE chief symptoms and conditions in this case were as follows: severe headache, more localized in right temporo-frontal region; pain on localized pressure and percussion; impairment of sight and hearing; choked disk; dilatation of right pupil; three days before death paralysis of left arm and paresis of left leg, paresis of right face, ataxic aphasia.

H. B., æt. 12 years, was admitted to the German Hospital, April 12th, 1887. The father of the patient died suddenly from the effects of a sunstroke; the mother from cholera morbus. The patient was the youngest of six children, and the only survivor, the rest having died in infancy, childhood, or youth, but from what diseases could not be ascertained. The patient was well until she was two years of age, when, according to the statements furnished by a relative, she became wholly paralyzed, and remained so for four weeks, after this slowly ceasing to be helpless, although her gait always continued to be somewhat uncertain and peculiar. She was somewhat sickly for two or three years, when she regained her general health completely. She was sent to school, but was rather dull.

Toward the end of September, 1886, she fell from a

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front door step, a height of four feet, and was picked up unconscious, in which condition she remained for about ten minutes. In December, 1886, and January, 1887, she suffered from suppurative inflammation of the ear, and, at times, from nose bleeding. After the fall she always complained of headache, which became very intense early in April, 1887, and so continued until the time of her death. When admitted to the hospital, April 12th, her chief complaint was of this headache, which she localized especially over the right temporo-frontal region. Some tenderness to pressure and percussion was present over this same region. Her tongue was thickly coated, but she had no fever or general symptoms. Examination shortly after admission showed both pupils somewhat dilated, the right, however, undoubtedly larger than the left. She had some difficulty in seeing, and her hearing was somewhat defective, or, at least, it was difficult, at times, to fix her attention, or get responses without loud questioning. Unfortunately, no detailed study of sight, hearing, or the other senses, was made. At the time of admission to the hospital she gave no evidences of paralysis, or of any other symptoms than those above detailed.

Until the evening of Friday, April 29th, her condition continued as above described. At this time, she suddenly became paralyzed in the left arm, and paretic in the left leg; her speech was also affected, articulation becoming for a time so indistinct and imperfect that nothing she attempted to say could be understood. She did not become completely unconscious at the time of the paralytic attack; she did not have either Cheyne-Stokes or stertorous breathing. Her mouth was slightly drawn to the left, her pupils remaining dilated, the right continuing larger than the left. So far as could be determined, sensation was not affected on either side. Ophthalmoscopic examination showed choked disk in right eye. The condition in the left eye was not positively determined, although the vessels were engorged.

On May 1st a consultation was held to consider the

question of trephining for the removal of the supposed growth. At the consultation were present Drs. Adam Trau, D. Hayes Agnew, F. H. Gross, J. B. Deaver, and Charles K. Mills, with the resident physician of the hospital, Dr. George A. Bodamer. After some discussion, it was concluded best not to trephine. This conclusion was reached because of the presence of certain symptoms and the absence of others, which threw doubt upon the exact location of the growth. Apparently, at first sight, the case was one of brachial or brachio-crural monoplegia, from lesion of the arm centres of the cortex and adjacent areas. The paralysis of the arm and paresis of the leg were the most marked conditions. The patient, however, had also dilatation of the right pupil, and either paresis of the lower right face, or slight spasm of the lower left face. It was really somewhat difficult to determine whether the condition was one of paresis on one side, or very slight spasm on the other. The left corner of the mouth was slightly drawn up, the right apparently drooping somewhat. It was argued that if the condition was one of right-sided facial paresis, the paralysis of the limbs associated with this condition could not be explained by a single growth of the cortical centres of the right side; neither was the dilatation of the right pupil easily explicable from the standpoint of a lesion of the arm and leg centres of the cortex. The entire absence of spasm, either local or general, was also somewhat against the probability of the tumor being one so superficially localized in the motor zone, and connected with the membranes as to be readily reached by operation. Finally, the sudden occurrence of marked paralysis, after the long continuance of other symptoms of brain tumor or abscess, showed that either a hemorrhage had occurred, as was suggested by Dr. Trau, or that a sudden and somewhat extensive break-down of tissues in the vicinity of the old lesion had taken place. The suddenness of the paralysis seemed to negative the view that it was the result of the extension of the growth by slow development from a latent to the motor region, although this idea was con-

sidered, on the whole, the conditions seemed to point to a growth either at the base on the right side, or so low down in the cerebrum as to exert pressure upon the descending motor tracts and, possibly, also upon some fibres of the facial and oculo-motor nerves of the same side. The conditions as to consciousness and speech were peculiar. The patient certainly understood much, if not all, that was said to her on May 1st, although the voice had to be somewhat loud and the manner earnest in order to get response. Her speech was thick and indistinct; the aphasia was ataxic rather than amnesic. On asking her what her name was, she answered "Hattie," so that she could be understood, although the articulation of the word was thick and imperfect. The patient died the morning of May 2d.

Autopsy.—At the autopsy, which was held thirty-six hours after death, were present Drs. Adam Trau, F. H. Gross, Charles K. Mills, and George A. Bodamer. The skull was found to be unusually thin, and roughened in a peculiar way on its inner surface; and here and there were jagged processes, especially in the occipital region. A considerable area of the calvarium was injected; and the outer surface of the dura mater showed corresponding streaks and patches of a bright red color, markedly in the postero-frontal, parietal, and occipital regions. The appearances were present on both sides, but were much more decided on the right. When the dura mater was removed, the exposed pia mater and surface of the brain at first showed nothing abnormal, except here and there a few spots of unusual coloration. Evidently no growth connected with the membranes was present on either the median or lateral aspects of the brain.

The removal of the brain from the skull was conducted with great care, but during the process a slight break through the surface of the brain occured at a point about the middle of the right second temporal gyre, and through this poured out a mahogany-colored fluid. The tear enlarging, a cavity and growth were revealed. The neoplasm was a frangible, semi-solid, light purplish mass, hav-

ing beneath and partly around it a cavity containing detritus, and a large unorganized, and evidently recent, clot The space occupied by the neoplasm, cavity, and clot was irregular in shape, its greatest length being about three inches, and its height and width probably about one-half its length. It occupied a large portion of the interior of the right temporal lobe, but was strictly limited to it. Careful sections showed that the anterior one and one-half inch of the lobe was not involved, and the tissue destroyed did not extend quite to the temporo-occipital junction.

A microscopical examination was made by Dr. Bodamer. This revealed a hemorrhagic or rather a very vascular glioma.